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Our File No. ILL01-010-US



Paul E. Rauch, Ph.D.,

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

David Y. Kim

Serial No. 10/760,144

Filing Date: January 15, 2004

For PLATFORM AND SYSTEM FOR
CRYSTAL NUCLEATION AND
GROWTH

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)
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) Examiner To Be Assigned
)
) Group Art Unit No. 1765
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INFORMATION DISCLOSURE STATEMENT

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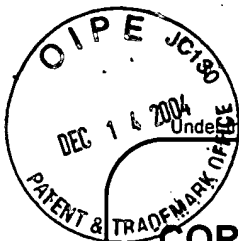
Dear Sir:

In accordance with the provisions of 37 C.F.R. § 1.56, Applicants request that citation and examination of the references identified on the attached PTO-1449 form, required copies of which are enclosed herewith in accordance with 37 C.F.R. §1.98, be made during the course of examination of the above-referenced application for United States Letters Patent.

Respectfully submitted,

[Signature]
Paul E. Rauch, Ph.D.
Registration No. 38,591

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CHANGE OF CORRESPONDENCE ADDRESS Application

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Application Number	10/4760,144
Filing Date	January 15, 2004
First Named Inventor	David Y. Kim
Art Unit	1765
Examiner Name	To Be Assigned
Attorney Docket Number	ILL01-010-US

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- ☒ Attorney or Agent of record. Registration Number 38,591
- ☐ Registered practitioner named in the application transmittal letter in an application without an executed oath or declaration. See 37 CFR 1.33(a)(1). Registration Number _____

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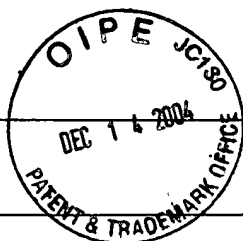
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This collection of information is required by 37 CFR 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Form PTO-1449 (Rev. 8-88)	Attorney Docket No. ILL01-010-US	Serial No. 10/760,144
INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)	Applicant: David Y. Kim, et al.	
	Filing Date: January 15, 2004	Group: 1765

U.S. PATENT DOCUMENTS

Examiner Initial*		Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
	A1	6,596,081	7/03	Arnowitz, et al.			
	A2	6,406,903	6/02	Bray, et al.			
	A3	5,961,934	10/99	Arnowitz, et al.			
	A4	5,256,241	10/93	Noever			

FOREIGN PATENT DOCUMENTS

Examiner Initial*		Document Number	Date	Country	Class	Subclasses	Translation	
							Yes	No
	A5	WO2001/088231	11/01	WIPO				

OTHER ITEMS - NON PATENT LITERATURE DOCUMENTS

Include, as applicable: Author, Title, Date, Publisher, Edition or Volume, Pertinent Pages

Examiner Initial*	A6	Kanelis, V., J. Forman-Kay, and L. Kay, <i>Multidimensional NMR methods for protein structure determination</i> . IUBMB Life, 2001. 52(6): p. 291-302.
	A7	Thuman-Commike, P., <i>Single particle macromolecular structure determination via electron microscopy</i> . FEBS Letters, 2001. 505(2): p. 199-205.
	A8	Stevens, R., <i>High-throughput protein crystallization</i> . Current Opinion in Structural Biology, 2000. 10(5): p. 558-563.
	A9	Steiner, H. and C. Haass, <i>Intramembrane proteolysis by presenilins</i> . Nature Reviews Molecular Cell Biology, 2000. 1(3): p. 217-224.
	A10	Mark, B., et al., <i>Crystal Structure of Human beta-Hexosaminidase B: Understanding the Molecular Basis of Sandhoff and Tay-Sachs Disease</i> . Journal of Molecular Biology, 2003. 327(5): p. 1093-1109.
	A11	Stewart, L., R. Clark, and C. Bohnke, <i>High-throughput crystallization and structure determination in drug discovery</i> . Drug Discovery Today, 2002. 7(3): p. 187-196.
	A12	Pfeifer, B., et al., <i>Biosynthesis of complex polyketides in a metabolically engineering strain of Escherichia coli</i> . Science, 2001. 291: p. 1790-1792.
	A13	Anderson, V.J. and H.N. Lekkerkerker, <i>Insights into phase transition kinetics from colloid science</i> . Nature, 2002. 416: p. 811-815.

Examiner	Date Considered
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

A14	Rosenbaum, D., et al., <i>Protein interactions and phase behavior: Sensitivity to the form of the pair potential</i> . Journal of Chemical Physics, 1999. 111(21): p. 9882-9890.
A15	Collingsworth, P., T. Bray, and G. Christopher, <i>Crystal growth via computer controlled vapor diffusion</i> . Journal of Crystal Growth, 2000. 219(3): p. 283-289.
A16	Krupka, H., et al., <i>The high-speed Hydra-Plus-One system for automated high-throughput protein crystallography</i> . Acta Crystallographica Section D-Biological Crystallography, 2002. 58(Part 10 Special Issue 1): p. 1523-1526.
A17	Walter, T., et al., <i>A procedure for setting up high-throughput nanolitre crystallization experiments. 1. Protocol design and validation</i> . Journal of Applied Crystallography, 2003. 36(Part 2): p. 308-314.
A18	Santarsiero, B., et al., <i>An approach to rapid protein crystallization using nanodroplets</i> . Journal of Applied Crystallography, 2002. 35(Part 2): p. 278-281.
A19	Hansen, C.L., et al., <i>A robust and scalable microfluidic metering method that allows protein crystal growth by free interface diffusion</i> . Proceedings of the National Academy of Sciences of the United States of America, 2002. 99(26): p. 16531-16536.
A20	Rosenbaum, D., P.C. Zamora, and C.F. Zukoski, <i>Phase behavior of small attractive colloidal particles</i> . Physical Review Letters, 1996. 76(1): p. 150-3.
A21	Yoshizaki, I., et al., <i>Systematic analysis of the effect of supersaturation on protein crystal quality</i> . Journal of Crystal Growth, 2002. 237(Part1): p. 295-299.
A22	Duffy, D., et al., <i>Rapid Prototyping of microfluidic systems in poly(dimethylsiloxane)</i> . Analytical Chemistry, 1998. 70(23): p. 4974-4984.
A23	Li, G., <i>A Simple and Efficient Innovation of the Vapor-Diffusion Method for Controlling Nucleation and Growth of Large Protein Crystals</i> . J. Appl. Cryst., 2000, 34:388-391.
A24	Bunick, C., et al., <i>Evaporative Microdialysis: An Effective Improvement in an Established Method of Protein Crystallization</i> . Acta. Cryst., 2000, D56:1430-1431.
A25	Forsythe, E., et al., <i>Vapor Diffusion, Nucleation Rates and the Reservoir to Crystallization Volume Ratio</i> . Acta. Cryst., 2002, D58:1601-1605.
A26	Shu, Z., et al., <i>In Situ Measurement and Dynamic Control of the Evaporation Rate in Vapor Diffusion Crystallization of Proteins</i> . Journal of Crystal Growth, 1998, 192:282-289.
A27	Saridakis, E., et al., <i>Improving Protein Crystal Quality By Decoupling Nucleation and Growth in Vapor Diffusion</i> . Protein Science, 2000, 9:755-757.
A28	Adachi, H., et al., <i>New Practical Technique for Protein Crystallization with Floating and Stirring Methods</i> . Jpn. J. Appl. Phys. 2003, 42:1161-1163 Part 2, No. 10A.
A29	Bray, T., et al., <i>New Crystallization Systems Envisioned for Microgravity Studies</i> . J. Appl. Cryst. 1998, 31:515-522.
A30	Wibowo, C., et al., <i>Streamlining Crystallization Process Design</i> . CEP Magazine, 2004, pp.30-39.
A31	Howard, E. and R. Cachau, <i>Ink-jet printer heads for ultra-small-drop protein crystallography</i> . Biotechniques, 2002. 33(6):p.1302-1305.